

Attorney Docket: WDUMR-022US
Application No.: 09/883,123
Title: PARSING SYSTEM

CLAIMS

45. (Currently Amended) A system for parsing unstructured, or partially structured, name and address data in any language and script so as to produce structured name and address data; said system comprising:

- a. Knowledge base which analyses said unstructured or partially structured, name and address data at a number of levels, including at a lexico-grammatical level and an orthographic level and a semantic level and a contextual level, wherein linguistic theory enables the complete representation of all possible forms of said data;
- b. Computer readable medium, wherein said knowledge base is stored upon said computer readable medium;
- c. Knowledge base using a knowledge representation language wherein said knowledge base can build a complete representation of all possible forms of said data provided in any language and script, from any country;
- d. Knowledge base containing a knowledge representation layer, a knowledge base management layer, a language programming interface layer and a language inference layer containing an inference engine;
- e. System processing at least portions of said unstructured or partially structured name and address data in an incremental manner, involving multiple parsing steps, whereby at each parsing step said inference engine utilizes an inference strategy, represented within a number of inference modules that reason about the language knowledge based on knowledge instances maintained in the knowledge base management layer, to build a body of executable knowledge about patterns contained in said data, thus producing more structured data that may be submitted to further parsing steps until fully structured data is produced.